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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,623	07/30/2003	Haruo Yoda	520.42972X00	9116
20457	7590	01/05/2005	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			NGUYEN, KIET TUAN	
			ART UNIT	PAPER NUMBER
			2881	

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/629,623	Applicant(s) YODA ET AL.	
	Examiner Kiet T. Nguyen	Art Unit 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

***Objected Informalities***

The disclosure is objected to because of the following informalities:

**In The Claims**

Claim 5, line 13, "X- and Y-axis direction" should be -- X- and Y-axis directions --.

Appropriate correction is required.

***Rejection Under 35 U.S.C. 112, Second Paragraph***

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the surface" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the same subregions" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the number of times" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the number of chips" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the surface" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "said strip subregion" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the partitioned bit map data" in lines 8-9. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the bit map data" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the surface" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the exposure region" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the sample surface" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the exposure region" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the repeated pitch" in lines 15-16. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the same subregions" in line 19. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the same subregions" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the next exposure unit region" in lines 15-16. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "said data generation unit" in lines 16-17. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the stored exposure unit region" in lines 17-18.

There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the chip stripe regions" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the width" and "the scope" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the data generation unit" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the second means" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the data generation unit" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the second means" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claims 3-7 provide for the use of a method, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 3-7 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under

Art Unit: 2881

35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

**Rejection Under 35 U.S.C. 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-11 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Yui et al. (6,483,120) or Muraki et al. (6,515,409).

Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Okunuki (6,787,784).

Okunuki (6,787,784) discloses, in figs. 1-11C, a charged particle beam apparatus. The apparatus includes blanking means 105 for individually controlling charged particle beams; deflectors 104 for deflecting multiple charged particle beams; a pattern generation unit 119 for generating pattern data and bit map data; a storage unit 118 having a double buffer memory unit 118-1 and 118-2 for storing the current bit map data and the next bit map data; a control unit 121 for controlling the blanking means 105 based on the stored bit map data; a main field 152 formed by scanning in a strip region 153 and a vertical direction by a main deflector (see figs. 5A-5D and col. 9, lines 8-20);

a CPU 112 and a controller 113 for controlling and correcting distortion of the blanking means 105, the deflectors 104 and a moving stage 107; and the pitch (or the area) of a chip pattern 151 on a wafer 108 (see col. 8, lines 49-56).

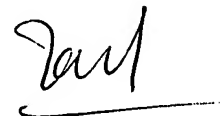
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet T. Nguyen whose telephone number is 571-272-2479. The examiner can normally be reached on Monday-Friday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KN



KIET T. NGUYEN  
PRIMARY EXAMINER